



0000150891

RECEIVED

2014 JAN 17 P 4:09

AZ CORP COMMISSION
DOCKET CONTROL**GREGORY L. BERNOSKY**
Manager – Regulatory Affairs
State RegulationMail Station 9708
PO Box 53999
Phoenix, Arizona 85072-3999
Tel 602-250-4849
Gregory.Bernosky@aps.com

January 17, 2014

Commissioner Robert Burns
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007RE: INNOVATIONS AND TECHNOLOGICAL DEVELOPMENTS
DOCKET NO. E-00000J-13-0375

Dear Commissioner Burns:

Arizona Public Service Company (APS or Company) appreciates your foresight in considering those issues that are relevant to a review of potential advancements in technology and other innovations within the electric industry. We appreciate the opportunity to provide comments on the proposed scope of the Innovations and Technological Developments Docket as described in your letter dated December 3, 2013.

APS is committed to its customers to provide safe and reliable service at a reasonable cost 24 hours a day, 7 days a week. The Company continually searches for ways to improve its service and to help customers be smart energy users. Researching and testing advanced utility and grid technologies as they are identified, determining if a specific technology will benefit the system on which customers depend, and adopting those technologies that prove to be advantageous and economical are critical steps in preparing the Company and its customers for the future of the electric industry.

The Commission, utilities, and interested parties should be aware of the innovations and technologies that are available to and emerging within the industry. The subject areas listed in your letter encompass a wide variety of technological pursuits and provide an excellent compilation of innovations and advancements. Many of these are being developed today, and others have the potential to impact the electric industry and customers in the near future.

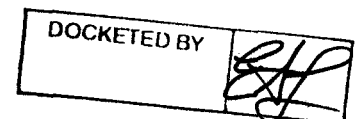
The workshop process envisioned in this docket is a well-conceived vehicle to raise awareness of evolving technologies. It is important that participants and the public be informed and educated about the value and cost that these technologies bring to customers, the utility, and the grid itself. The topics as outlined in your letter form a good basis for discussing a wide variety of issues surrounding technological advances and will allow participants to develop an appreciation of both the capabilities and the limitations of emerging technologies.

In addition to the topics outlined in your letter, APS recommends that workshop participants would benefit from an initial overview of the status of deployed technology and innovation in the electric utility industry today. This additional topic would provide a solid background for meaningful discussions of potential advancements in the industry and would allow Arizona utilities to describe technologies and innovations that have been adopted to date by both the utilities and their customers.

ORIGINAL

Arizona Corporation Commission
DOCKETED

JAN 17 2014



For example, APS is and has been a leader in developing, testing, and adopting advanced technologies and other innovations. The Company tested the earliest electric vehicles in the 1960s, and since that time through endeavors such as the cutting-edge Solar Test and Research Center (STAR), the energy-efficient Environmental Showcase Home, the award-winning Transformer Oil Analysis Notification (TOAN) system, and today's battery storage and advanced grid technologies, APS has continually deployed those technologies that provide operational, customer, environmental, and financial benefits. The Company monitors the status of technology within the electric industry and works with universities, national laboratories, and the Electric Power Research Institute to evaluate advanced technologies.

Also per your request, APS believes any of the following experts (listed alphabetically) would provide valuable information, experience, and viewpoints as presenters at a workshop. Each of these has expressed an interest in sharing their expertise in this docket.

Peter Asmus, Principal Research Analyst, Navigant. Mr. Asmus is an expert in microgrids and virtual power plant technology and the integration of new technology into the existing grid.

Richard Barnes, Vice President and Global Director, Sustainable Energy Use, DNV KEMA. Mr. Barnes has a wealth of experience in designing and implementing successful business strategies in the areas of energy efficiency, demand response, sustainability, and carbon management.

Thomas R. Brill, Special Counsel and Director of Strategic Projects, San Diego Gas and Electric Company. Mr. Brill led the strategic analysis department at San Diego during a time of significant changes in the electric industry and is well versed in new technologies in the energy industry and how those technologies have changed the nature of services provided by utilities.

Kevin Dasso, Senior Director of Smart Grid and Technology Integration, Pacific Gas and Electric Company. Mr. Dasso has significant utility experience in developing and deploying advanced grid technologies and next-generation distribution automation technology to improve customer service reliability.

Denis George, Corporate Energy Manager, Kroger. The Kroger Company has received numerous national and regional awards for energy efficiency and sustainability, and as Corporate Energy Manager for Kroger, Mr. George manages the company's energy efficiency initiatives, renewable energy projects, and Energy Star program compliance.

Aaron Goldfeder, CEO and co-founder, Energy Savvy. Energy Savvy is a leading cloud-based software technology provider for utility and government energy efficiency programs. Mr. Goldfeder is an expert on the interaction of technology and energy efficiency and how data transparency can improve the measurement of energy savings.

Bryan Hannegan, Associate Lab Director, Energy Systems Integration, Sandia National Laboratories. Mr. Hannegan has extensively researched technologies and practices that enable cleaner and more efficient renewable power generation options and that reduce the environmental footprint associated with electric power generation, delivery, and use.

Becky Harrison, CEO, Gridwise Alliance. Ms. Harrison has hands-on experience in distribution and information technology in the electric utility business, having managed several successful business transformation efforts leveraging new technologies including advanced grid implementation at Progress Energy.

C. R. Herro, Vice President, Energy Efficiency and Sustainability, Meritage Homes. Meritage Homes is acknowledged as one of the leading homebuilders in the nation for advanced technology adoption and energy efficient construction, and Mr. Herro provides an expert customer viewpoint and experience regarding the viability of technology integration.

Arshad Mansoor, Senior Vice President of the Research and Development Group, Electric Power Research Institute (EPRI). Mr. Mansoor has extensive experience in research, development, demonstration, and application of transmission, distribution, and energy utilization technologies.

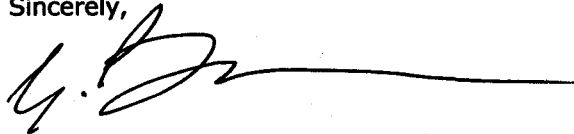
Robert Wilhite, Global Director, Management and Operations Consulting, DNV KEMA. Mr. Wilhite is an industry expert on issues relating to automated grid technologies and integration, and has developed perspectives on what an optimal grid may look like in the future.

Additionally, APS would be happy to make available the Company's in-house subject matter experts to present on relevant topics at each of the workshops.

APS's experience in new technology adoption demonstrates that no matter which technologies or innovations emerge as viable within the electric power industry, flexibility from utilities, stakeholders, and regulators is fundamental to the effective implementation of the technology of the future while at the same time acknowledging the continuing need for a reliable grid.

Should you or your office determine that you would be interested in any of the above-referenced presenters to participate in the upcoming workshops, I can assist you by communicating with each speaker to arrange schedules. You can reach me at 602-250-4849 or at Gregory.Bernosky@aps.com. We look forward to participating with Commissioners and industry representatives in workshops and discussions regarding the technologies and innovations that will help APS create a sustainable energy future for Arizona.

Sincerely,



Gregory L. Bernosky
GLB/bgs

cc: Docket Control
Commissioner Bob Stump
Commissioner Gary Pierce
Commissioner Brenda Burns
Commissioner Susan Bitter Smith
Steve Olea
Parties of Record

Copies of the foregoing delivered/mailed this 17th
day of January, 2014 to:

Alan Kierman
IO Data Centers
615 N. 48th Street
Phoenix, AZ 85008

Greg Bass
Noble Americas Energy Solutions
401 W. A Street, Suite 500
San Diego, CA 92101

Jack Blair
SSVEC
311 E. Wilcox Drive
Sierra Vista, AZ 85635

Fred Breedlove
Squire Sanders LLP
1 E. Washington, 27th Floor
Phoenix, AZ 85004

Bradley Carroll
Tucson Electric Power Company
88 East Broadway Blvd.
Mail Stop HQE910
Tucson, AZ 85701

Michael Curtis
Attorney
Curtis, Goodwin, Sullivan, Udall & Schwab,
P.L.C.
501 E Thomas Road
Phoenix, AZ 85012

Andrea Deveau
Direct Energy Services

Lyn Farmer
Administrative Law Judge
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

Jason Gellman
Roshka De Wulf & Patten, PLC
400 E. Van Buren Street, Suite 800
Phoenix, AZ 85004

Peggy Gillman
Mohave Electric Cooperative, Inc.
P.O. Box 1045
Bullhead City, AZ 86430

James Hamilton
Hamilton Consulting
822 N. 5th Ave.
Phoenix, AZ 85003

Janice Alward
Legal Division
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

Copies of the foregoing delivered/mailed this 17th
day of January, 2014 to:

Dillon Holmes
Clean Power Arizona
9635 N. 7th Street No 47520
Phoenix, AZ 85068

Stephanie Wojcik
Finance Director
Town of Wickenburg
155 N. Tegner, Suite A
Wickenburg, AZ 85390

Heather McInnelly
Renewable Resources Specialist
Navopache Electric Cooperative
1878 W. White Mountain Blvd.
Lakeside, AZ 85929

Steve Olea
Utilities Division
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

Michael Patten
Attorney
Roshka DeWulf & Patten, PLC
One Arizona Center, 400 E. Van Buren
Street, Suite 800
Phoenix, AZ 85004

Lawrence Robertson, Jr.
Attorney At Law
P.O. Box 1448
Tubac, AZ 85646

Kimberly Ruht
Attorney
TEP
P.O. Box 711
Tucson, AZ 85702

Sidney Smith
Manager
HoHoKam Irrigation & Drainage District
142 S. Arizona Blvd.
Coolidge, AZ 85128

William Sullivan
Attorney
Curtis, Goodwin, Sullivan, Udall & Schwab,
P.L.C.
501 E Thomas Road
Phoenix, AZ 85012

Christopher Thomas
Squire Sanders LLP
1 E. Washington, 27th Floor
Phoenix, AZ 85004

John Wallace
Grand Canyon State Electric Cooperative
120 North 44th Street, Suite 100
Phoenix, AZ 85034

Anthony Wanger
IO Data Centers
615 N. 48th Street
Phoenix, AZ 85008

Copies of the foregoing delivered/mailed this 17th
day of January, 2014 to:

Christopher Hitchcock
Law Offices of Christopher Hitchcock
PO Box AT
Bisbee, AZ 85603